2001 Air Quality Highlights

Ground-Level Ozone in St. Louis

Throughout the 2001 **ozone** season, only two **ozone exceedances** occurred in the St. Louis area. This represents an increase of one from the 2000 **ozone** season. The St. Louis area has a good opportunity to attain the **National Ambient Air Quality Standard (NAAQS)** for **ozone** in 2002.

St. Louis has implemented several control strategies in recent years to reduce ground-level **ozone**, including the use of a cleaner-burning **reformulated gasoline**. The Stage II vapor recovery program put special nozzles on all area gasoline pumps to catch fumes during re-fueling. The St. Louis community also launched a vehicle emissions inspection program, the Gateway Clean Air Program, in 2000.

St. Louis area residents made voluntary choices to help reduce **ozone,** such as carpooling, waiting to fill their cars up until after 5:30 p.m., taking the bus and avoiding the use of charcoal lighter fluid. For more information regarding ground-level **ozone** in St. Louis, see page 17.

Gateway Clean Air Program

The Gateway Clean Air Program entered its second year of operation as a primary part of Missouri's efforts to bring St. Louis into **attainment** with the U.S. Environmental Protection Agency's (EPA) **ozone** regulations. The program celebrated a milestone when it conducted its one millionth vehicle emissions test on Sept. 25, 2001. The program tests vehicles in St. Louis, St. Charles and Jefferson counties and in the city of St. Louis, using a new enhanced emissions testing procedure. Also, vehicle emissions testing entered the second year of operation in Franklin County, using an improved basic idle emissions test.

More information about this program can be found in the Gateway Clean Air Program Annual Report and is available by visiting the following Web sites: gatewaycleanair.com, www.dnr.state.mo.us/alpd/apcp/gcap/ or www.cleanair-stlouis.com/gcap/.

Fuels

The Missouri Department of Natural Resources continues to develop methods for the St. Louis and Kansas City areas to reduce emissions of volatile organic compounds (VOCs) that contribute to the formation of ground-level **ozone**. St. Louis is required to reduce VOCs due to its status as an **ozone nonattainment area**, while the Kansas City reductions are contingency controls in response to violations of the federal health-based **ozone** standard in 1995 and 1997.

Stage II Vapor Recovery is one of the most effective means of reducing **ozone violations**. The department has developed the Missouri Performance Evaluation Test Procedures (MOPETP) to ensure that the Stage I and II vapor recovery equipment in the St. Louis **ozone nonattainment area** meet the mandatory 95 percent efficient requirement. The MOPETP is a comprehensive set of tests designed to determine the efficiency of gasoline vapor recovery systems and components. The department's Air Pollution Control Program approved a vapor recovery system called the Balance System. To date, nine different manufacturers of vapor recovery equipment have been tested and approved. These manufacturers hold MOPETP approvals for more than 100 components of the Balance System vapor recovery equipment.

As of Jan. 1, 2001, only MOPETP-approved systems and components are authorized for use in the St. Louis **ozone nonattainment area**. Auto manufacturers are in the process of conducting "Novel Facility" MOPETP testing to demonstrate these unique initial fueling facilities meet the efficient requirements.

An operating permits process is used to ensure that vapor recovery equipment continues to function properly after being installed. To date, all service stations in the St. Louis **ozone nonattainment area** have applied for and received an initial operating permit. The operating permit requires facilities to pass tests prior to receiving a renewed operating permit. Operating permits are renewed on a five-year cycle.

Federal **reformulated gasoline (RFG)** has been required at retail gasoline stations in the St. Louis **ozone nonattainment area** since June 1, 1999. Federal **RFG** is a gasoline formula designed to burn cleaner by adjusting the amount of various components already found in conventional gasoline. **RFG** is required all year, not just during the summer. It reduces exhaust emissions and evaporative emissions. **RFG** is administered and enforced by EPA. Phase II of the **RFG** program, which began Jan. 1, 2000, requires additional emission reductions compared to Phase I **RFG**. Phase II **RFG** requires a minimum of 25 percent VOC reductions, a 20 percent reduction in air toxins, and a five to seven percent reduction in **NO_x** emissions. Another important benefit of **RFG** is that it helps ensure the vehicles emission control equipment continues to perform well throughout the life of the vehicle.

In 2001, low Reid Vapor Pressure (RVP) gasoline was used during the summer months in the Kansas City **ozone** maintenance area. During summer months, low RVP gasoline evaporates less than conventional gasoline, which reduces emissions of VOCs. Low RVP gasoline was first required in St. Louis in 1994 and in Kansas City in 1997. In early 2001, an amendment to lower the summer RVP requirement in Kansas City from 7.2 pounds per square inch (psi) to 7.0 psi beginning June 1, 2001, was adopted. The 7.0 psi RVP requirement will help Kansas City maintain compliance with the national **ozone** standard.

St. Louis Attainment Date Extension

The 1990 Amendments to the Clean Air Act set a deadline of Nov. 15, 1996, for complying with the **ozone** standard, but the U.S. Environmental Protection Agency (EPA) realized that some areas may be affected by air pollution transported from outside of **nonattainment areas**. In response to this realization, EPA allowed areas including St. Louis to apply for extensions to the **attainment** deadline. The St. Louis **nonattainment area** clearly demonstrated that emissions that came from outside the area were adversely impacting the air quality.

On June 26, 2001, EPA published a final rule in the Federal Register granting an **attainment** date extension for the St. Louis **ozone nonattainment area**. The St. Louis area retains its moderate **nonattainment** classification and has a new **attainment** deadline of Nov. 15, 2004. EPA determined that the plans submitted by Missouri and Illinois included sufficient control measures to demonstrate that the St. Louis area will reach the **national ambient air quality standard**.

With this **attainment** date extension, the area avoids reclassification to serious **nonattainment** status and more stringent construction permitting requirements. The extension allows the area time to show that the air quality plan being implemented will achieve cleaner air.

Ozone Transport

Because some **nonattainment areas** are affected by air pollution from sources outside the area, initiatives involving the study of transported emissions and regional controls are becoming more common. In October 1998, EPA issued a rule, known as the **Oxides of Nitrogen (NO_x) State Implementation Plan (SIP)** Call. This **NO_x SIP** Call would have required Missouri to reduce emissions of **NO_x**, a commonly transported air pollutant that contributes to **ozone** formation. EPA's modeling indicated that the transport of pollutants from Missouri contributes to **ozone** problems in Illinois, Indiana, Michigan and Wisconsin. After several legal challenges, the EPA's **NO_x SIP** Call became effective for 19 of the 22 originally named states, excluding Missouri, Georgia and Wisconsin.

In 2000, the **Missouri Air Conservation Commission** adopted a statewide rule to reduce **NO_x** emissions. Missouri's statewide **NO_x** rule is intended to improve air quality in the St. Louis **ozone nonattainment area**. Missouri's statewide **NO_x** rule, 10 CSR 10-6.350, will reduce the emissions of **NO_x** from electric generating units and establish a **NO_x** emissions trading program for the entire state. Some facilities have started reducing their **NO_x** emissions ahead of schedule and have requested early reduction credits under the program.

EPA published a **NO_x SIP** call for Missouri on Feb. 22, 2002, in the Federal Register. At this time, Missouri is evaluating the current statewide **NO_x** regulation and the **NO_x SIP** call to determine what Missouri's response will be.

Emissions Banking and Trading

The department participated in the creation of an amendment to the Missouri Air Conservation Law, which mandates the development of an emissions banking and trading program for the **nonattainment** and maintenance areas in Missouri. This legislation became effective Aug. 28, 2001. It requires the **Missouri Air Conservation Commission** to adopt a rule that will establish a "Missouri Air Emissions Banking and Trading Program."

The department is developing the rule through a workgroup process with interested parties, including facilities from the **nonattainment** and maintenance areas, environmental groups and EPA. The workgroup process began in October 2001 and is projected to be completed in April 2002. The department expects the final rule to be effective in March 2003.

Emissions banking and trading programs allow facilities to generate emission reduction credits (ERCs) by emitting below their applicable emission standard for a particular pollutant. The ERCs can be banked, traded or sold to a different facility.

These programs are helpful to facilities that are planning to expand an existing operation or build an additional facility in a **nonattainment** or maintenance area. These programs are also economically beneficial to facilities that consistently emit below their allowable levels.

This program should help Missouri maintain the **National Ambient Air Quality Standards** established by the Clean Air Act while fostering economic growth. As established in the law, an environmental contribution of three percent will be subtracted from the bank of credits each year to protect air quality.

CENRAP

The department's Air Pollution Control Program was a founding member of the Central States Regional Air Planning Association (CENRAP), an organization of states, tribes, and federal agencies. CENRAP is one of the five Regional Planning Organizations across the U.S. and includes the states and tribal areas of Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas and Louisiana. The organization was chartered to initiate and coordinate activities associated with the management of regional haze and other air quality transport issues involving the central states. CENRAP promotes the federal visibility rules through the coordination of science and technology to support air quality policy issues. CENRAP is developing a set of recommended strategies that its members may choose in their individual implementation programs, regulations and laws.

Cooperative Development of Regulations

Involving the public in the process of making air quality rules helps to create fair, effective regulations that have broad support. In 2001, the department continued its commitment to public participation by convening workgroups to help develop air regulations. A workgroup brings industry and the public together with government agencies to share concerns and exchange ideas while developing regulations.

The department worked with leaders from industry, environmental organizations and local governments to improve air quality in the Kansas City area. The department participated as a member of the Mid-America Regional Council in the development of an air quality improvement plan for the Kansas City **ozone** maintenance area. The Kansas City **ozone** maintenance area includes Johnson and Wyandotte counties in Kansas and

Clay, Jackson and Platte counties in Missouri.

The department actively participates in air quality meetings of the two major metropolitan planning organizations, East-West Gateway Coordinating Council in St. Louis and Mid-America Regional Council in Kansas City. At these public meetings, the department provides updates on air quality projects and discusses proposed rules and plans with other participants.

Permit Streamlining Workgroups

The department's Air Pollution Control Program participated in the Governor's Streamlining Efforts – Missouri Results Initiative. The issue addressed was permit efficiency in the construction and operating permit units. The mission of the Missouri Results Initiative was to reduce processing time by 80 percent.

The Missouri Results Initiative conducted two parallel workgroups within the Air Pollution Control Program, one for Construction Permits (CP) and one for Operating Permits (OP). The names of the workgroups are Managing For Results – CP and OP, respectively. The workgroups consisted of members from the Air Pollution Control Program, the department's regional offices, environmental groups and regulated industry. The primary goals were to improve the quality of air permits, decrease the number of complaints and issues, and improve turnaround time on issuing permits while continuing to improve and protect the air quality of Missouri.

The workgroups flowcharted the permitting processes and identified a target for the 80 percent reduction. The workgroups presented their recommendations to the department's management in February 2002.

Operating Permits

In 2001, the Operating Permit Unit progressed toward issuing all of the initial Part 70 State Installation Operating Permits. At year's end, 384 Part 70 Operating Permits, or 86 percent, had either completed the initial technical and peer review, had been issued or closed out. Permits that had undergone technical and peer review still need to be reviewed by the public and EPA. This process normally can be completed in two to three months, although routine objections received by the Air Pollution Control Program could delay this process.

Overall, the Operating Permit Unit completed 638 permitting actions. Those actions involved Part 70, Intermediate and Basic Operating Permit applications.

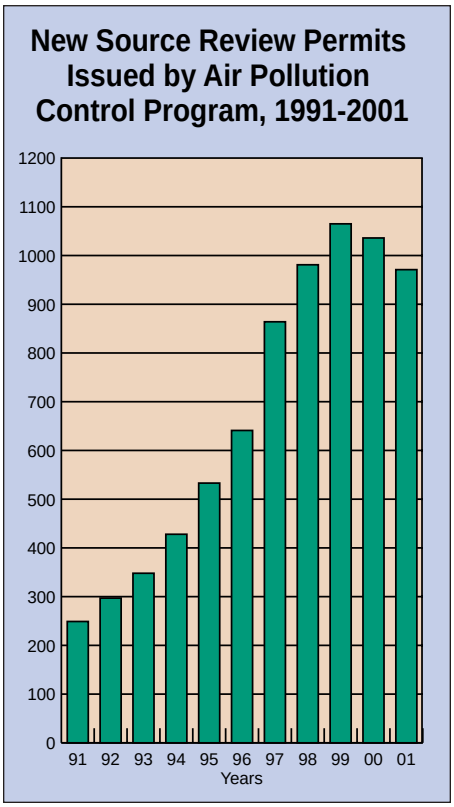
In 2001, the Air Pollution Control Program began posting drafts of operating permits on the program's Web site for public review. The documents remain on the Web throughout the public notice process, to enable citizens to have easier access to the documents. To view the operating permit drafts, visit http://www.dnr.state.mo.us/alpd/apcp/PermitPublicNotices.htm.

New Source Review Permits

Among the 670 New Source Review permit actions completed in 2001, notable major level construction permits were issued for Ag Processing Inc., Associated Electric Cooperative Inc – Holden Power Plant and Panda Montgomery Power.

Also, the New Source Review Unit recently completed a significant project jointly with the Missouri Limestone Producer's Association. Together they developed an automated computer spreadsheet that allows the limestone quarry operators to quickly and efficiently determine the level of operations of their equipment at any particular site in Missouri that meets or exceeds the air pollution control requirements. More information on the automated computer spreadsheet is available on page 8.

The draft construction permits may be found on the Program's Web site by visiting http://www.dnr.state.mo.us/alpd/apcp/PermitPublicNotices.htm



Initial Review Unit

In year 2001, the Initial Review Unit was created to implement one of the more significant Office of the State Auditor recommendations regarding reorganizing the functions of the New Source Review (NSR) Unit. The establishment of this unit will enhance the performance of Air Pollution Control Program permitting section by more effectively screening permit applications. The goal for the Initial Review Unit is to streamline both the construction and operating permit application process by screening out incomplete applications, reducing the frequency of applications that are put on hold to wait for additional information and improving customer service.

Enforcement Actions and Results

The department's Air Pollution Control Program performed 1,750 stationary source inspections in the 2001 calendar year. The program also issued 996 Notices of Violation (NOVs) in 2001. Settlements were reached in 213 cases. These settlements resulted in paid penalties totaling $296,606 and suspended penalties totaling $388,250. The department referred 22 cases to the MissouriAttorney General's Office.

Asbestos

Federal regulations require that all buildings must be inspected for the presence of asbestos-containing materials (ACM) before they are renovated or demolished. A Missouri-certified inspector must conduct the inspection. In most cases, ACM must be removed before beginning renovation or demolition. During 2001, the Air Pollution Control Program received notification of 1,126 regulated projects and conducted 498 inspections.

Owners or contractors of demolition or renovation operations must submit a notice of intent to demolish or renovate a structure to the department's Air Pollution Control Program 10 working days prior to start of operation for review and approval. Single family homes of four or fewer dwelling units are not subject to the regulations. However, when more than one residential structure is involved on the same city block per one-year period, or if the residential structure will be used for fire training, the regulations apply.

EPA Audit

In April 2001, EPA published an audit report that praised the Department of Natural Resources Air Pollution Control Program efforts and provided some helpful information to improve its processes.

The audit, conducted in July 2000, was part of the EPA Region 7's effort to review each state's air quality program once every four years. The Department of Natural Resources Air Pollution Control Program director consented to be the first state in EPA Region 7 to participate in the comprehensive review.

The audit outlined suggestions for the collection of emission inventory data. For example, EPA suggests that the information collected from industry include emission release point types. The different type of emission sources can vary greatly, such as stack emissions and fugitive dust emissions. The report recommends revising the emission inventory forms to collect all necessary information.

The audit reported that the department's Air Pollution Control Program is running a very competent permitting program. Unfortunately, high staff turnover makes this difficult. The audit recommends increasing staff salaries to ensure positions are competitive with the private sector. In addition, the audit suggested more outreach and education be provided to the regulated community regarding permitting requirements. According to EPA Region 7, this would reduce the number of sources constructing without a permit.

In regards to enforcement issues, the audit recommends that a penalty policy be developed to establish consistency and ensure fairness when assessing penalties against violators. The audit also recommends that the inspection forms be revised to contain more significant applicability requirements.

Regarding the program's planning efforts, EPA notes that the program has developed a Rulemaking Manual that provides all the necessary informa-

tion to draft, propose and finalize a new or revised rule. Developing this manual has resulted in a significant improvement in the quality and timeliness of rulemaking and in the submittal of **state implementation plans**.

The audit praised the department's new emissions inventory system, MoEIS. This system is designed to enable sources to enter information directly using the Internet. MoEIS is expected to reduce staff workload and minimize data entry errors.

The audit also commended the department's ability to coordinate with regional offices and local agencies. The audit noted that the relationship between these offices seemed to be "symbiotic and mutually beneficial."

The entire report is available online at www.dnr.state.mo.us/alpd/apcp/epasum2000.htm.

The Small Business Compliance Advisory Committee

Small businesses are often focused on their day-to-day operations and may find it difficult to keep up with changing air pollution regulations and requirements. Section 507 of the 1990 Federal Clean Air Act Amendments recognized this and required states to develop a three-component assistance program to help small businesses. The three components are a small business ombudsman, a technical assistance program for small businesses and a compliance advisory panel. In Missouri, the compliance advisory panel is known as the Small Business Compliance Advisory Committee.

The Small Business Compliance Advisory Committee is comprised of seven members. Two are appointed by the governor, one each is appointed by the majority and minority leaders of the Missouri House and Senate, and one is appointed by the director of the Department of Natural Resources. The committee has the following responsibilities:

- Receive reports from the small business ombudsman (governor's office);
- Evaluate the impact of the Air Conservation Law and related regulations on small business;
- Make recommendations to the Department of Natural Resources, the **Missouri Air Conservation Commission** and the General Assembly regarding changes in procedure, rule or law that would help small businesses comply with the Air Conservation Law;
- Make recommendations to the **Missouri Air Conservation Commission** on rules to expedite the review of modifications for small business; and
- Conduct hearings and make investigations consistent with the purposes of the small business technical assistance activities.

Currently there are seven individuals serving on the committee that is chaired by Jack Lonsinger. Jack Lonsinger, Joel Braun, Dan Bunch and Doug Weible represent industry. Bruce Morrison and Caroline Pufalt represent the general public. Walter Pearson represents the Department of Natural Resources.

Small businesses face compliance issues in environmental areas other than air pollution. Steve Mahfood, Director of the Department of Natural Resources, asked the Small Business Compliance Advisory Committee to expand its scope to deal with these other issues. The Committee worked hard to become familiar with the other media this year, and dealt specifically with water permitting issues that very small slaughterhouses were having.

The small business technical assistance activity is performed by the Outreach and Assistance Center, a non-regulatory service of the Department of Natural Resources. Outreach and Assistance's business assistance unit carries out the activities and provides administrative support to the Small Business Compliance Advisory Committee. The mission of the department's Outreach and Assistance Center is to provide information, assistance, education and training to business owners, farmers, local governments and the general public on how to control or reduce pollution. For more information, contact the Outreach and Assistance Center at 1-800-361-4827 or (573) 526-6627.

Emissions Fees Workgroup

Members of the **Missouri Air Conservation Commission**, industry representatives and staff from the Air Pollution Control Program met during fall 2001 to review the cost of efforts to reduce air pollution in Missouri. Three meetings were held around the state in St. Louis, Kansas City, and Osage Beach, in conjunction with public meetings held by the **Missouri Air Conservation Commission**. This workgroup looked at whether the existing air emission fee was adequate to fund all the efforts needed to comply with the federal Clean Air Act. The conclusion of the workgroup was that an increase in the fee was needed to maintain existing air pollution control efforts in the state.

The next step in the process will be for the Air Pollution Control Program to propose a rule amendment to raise the air emission fee and submit the proposed rule to the **Missouri Air Conservation Commission** during the March 28, 2002 public hearing. The proposed rule is expected to raise the fee from $25.70 to $31 per ton of regulated air pollutant.